



**NOAA Teacher at Sea**  
**Kazu Kauinana**  
**Onboard NOAA Ship OSCAR ELTON SETTE**  
**May 8 – May 23, 2006**

**Mission: Fisheries Survey**  
**Day 6: Sunday, May 14, 2006**

**Weather Data from Bridge**

Latitude: 26, 31.9W  
Longitude: 174.57.4W  
Wind direction: 100  
Wind speed: 22 kts  
Sea wave heights: 4'  
Sea swell heights: 5-7  
Seawater temperature: 24.9c  
Sea level water pressure: 1024.  
Cloud cover: 3/8, cumulus

**Science and Technology Log**

Today I went out to Lisianski (formerly Lisiansky) Island with the supply coordinator and met scientist Jean Higgins and her assistant. Jean and her assistant, Veronica Decamp, are the only two on the island.

There are noticeable differences between Laysan and Lisianski. Lisianski has fine white sand beaches surrounding the entire island as well as in the interior. It does not have a lake in the middle like Laysan. Rather, this sandy island is thickly covered with shrubs. It appears to be more pristine than Laysan but it shares some of the same human profiteering and devastating environmental history with Laysan. Lisianski is an atoll whose center crater became filled with fine coral and sand, whereas the Laysans crater filled only partially with debris and then was topped off with water (presently high saline and brine). There are no coconut trees left; eighty had been planted in 1844, but the only trees I saw were Casuarinas dotting the islands here and there. There was a lot of scaevolas and bunch grass, Ipomoea, Boerhavia, Laysanicum, Solanum nigrum, Sicyos, and Tribulus.

The shoreline and water clarity of Lisianski also differ significantly from Laysan. There is a steep drop off 3-5 feet deep, and 6-10 feet from where the water laps up onto the sand. This in conjunction with dense, murky water (probably due to the very fine coral sand) makes swimming, bathing or snorkeling, a bad idea. I witnessed numerous Green sea turtles and Monk seals swimming just a few feet from where I stood on the beach. A few of the turtles were missing fins or had teeth marks on their carapace from sharks, probably Tiger sharks, that have been seen chasing them.

Something I did not mention about a commonality to all the islands thus far is the littering of dead animals scattered throughout the island. These are not like beaches on the occupied high islands where there are much less animals and scheduled city and county beach machine clean-up crews. Nature takes its course here and the living pass with dignity.

Lisianski suffered similar environmental disasters as Laysan except for guano mining. It did, however, go through a period in the early 1900s of Japanese plumage plundering. Like those words, “Plumage Plundering”? It means that at least 1.25 million birds were killed on both islands for their feathers. A businessman by the name of Max Schlemmer, who was an agent for the Pacific Guano and Fertilizer Company in 1908, entered into an invalid feather-harvesting-rights contract with Genkichi Yamanouchi of Japan. This contract also included Laysan. It is estimated that 284,000 birds were killed on Lisianski and close to a million on Laysan. These are two islands where the birds were so thick on the ground that it was difficult to walk without stepping on them, and with every step, you would sink waist deep into the ground because of the collapsing nest burrows.

In 1910, shortly after the feather poaching was stopped, rabbits were introduced to Lisianski and Laysan. The U.S. Revenue Cutter *Thetis* made a trip to Lisianski in 1914 and this is a report by Carl Elschner from that visit:

“At the time of my visit, there were two houses on the island which, as well as the phosphate deposits, lay in the former lagoon. That is, in a depression, which, however, does not contain water any more. Surrounding the houses are small patches of tobacco, which grow wild, having been brought by Captain Schlemmer. This is in fact the only vegetation on the island, and there hardly is a blade or stalk of any other plant to be seen with the exception of perhaps two poorly looking specimens of *Ipomea*, which I saw... The rabbits introduced have just exterminated the flora...now the rest of these rabbits (we found many dead but very few living ones) will have to submit to starvation.” (Elschner, 1915: 56)

It is important to note that the island is back to a healthy level due to the efforts of conservationists, scientists, monitoring by the U.S. Coast Guard and Navy, and expeditions such as the one I am on.

Malama Pono, Kazu